

Summary of Monitoring and Control for the Mosquito Program for the Week ending August 5, 2016

West Nile Virus (WNV) in and Around Boulder County

Mosquito activity is normal for this time of year. However, the mosquito sample collected from last week's city traps tested positive for WNV. WNV testing is done on a "pool" of mosquitoes of the same species from one or more traps. Since the number of each *Culex* species is typically low in the city's sentinel traps and testing is costly, traps are combined. The mosquitoes in the positive pool were collected at traps located at Locust and 11th, Christensen Park, South Boulder Recreation Center, Stazio Ball Fields and Tom Watson Park. The risk of WNV transmission to humans is estimated by calculating the vector index from the number of *Culex* mosquitoes, the rate of WNV infection in mosquitoes and the number of human cases. The risk of WNV transmission to people in the city is slightly elevated. Mosquito pools also tested positive from the Longmont area this week and the vector index is higher there. No WNV cases have been reported from Boulder County so far this season. Four human cases have been confirmed from other areas of the state.

WNV is present in the area every year, so the community is strongly encouraged by public health officials to take precautions to avoid mosquito bites by avoiding the outdoors during peak mosquito activity at dusk and dawn. If people are outside, they should wear long sleeves and pants and use an effective mosquito repellent. Window screens should fit tightly and be free of holes. Standing water should be drained to prevent mosquito breeding. More details are available at the [Fight the Bite website](#).

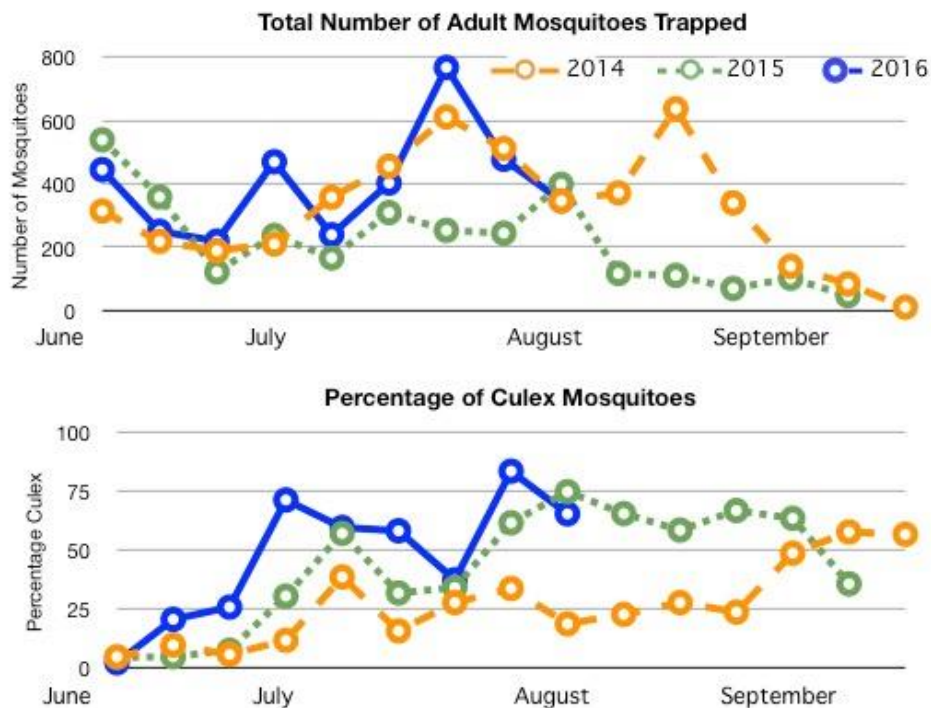
Adult Mosquito Trap Numbers

Adult mosquitoes are monitored from a grid of 16 traps located throughout the city. The mosquitoes are sorted and identified to species. *Culex* species from designated sentinel traps are sent to the Colorado Department of Public Health and Environment to be tested for the presence of WNV. The following table shows the results from surveillance traps.

Date	Total Mosquitoes	Number of <i>Culex</i> Mosquitoes	Percent <i>Culex</i> Mosquitoes	WNV Testing Results
June 7	477	12	2.5%	Not yet testing
June 14	253	53	29.9%	Negative
June 21	222	58	26.1%	Negative
June 28	472	338	71.6%	Negative
July 5	242	145	59.9%	Negative

July 12	405	237	58.5%	Negative
July 19	769	290	37.7%	Negative
July 26	480	424	88.3%	Positive
August 2	350	230	65.7%	Results pending

Weekly mosquito trap results will be charted throughout the season and the results from the previous two years will be included for comparison.



Nuisance Mosquito Program

Nuisance mosquito abundance and species composition can be compiled from 12 of the 16 WNV surveillance traps (four traps are specific for *Culex* mosquitoes), providing information about nuisance mosquito activity throughout the city. Two additional traps are placed in areas with high nuisance mosquito activity. These are located at the East Boulder Recreation Center and the Thorne Institute at the east side of Sombrero Marsh. “Floating” traps may also be set up to monitor areas of high mosquito activity. One is currently installed at the Greenbelt Meadows neighborhood.

The table below shows the adult nuisance mosquito counts in the three traps that are used for additional monitoring of nuisance mosquitoes, as well as the top five nuisance mosquito counts in WNV surveillance traps throughout the city.

Trap location	Number of Nuisance Mosquitoes (Number of <i>Culex</i>)
Greenbelt Meadows*	165 (16)
Tom Watson	11 (7)
East Boulder Community Center*	44 (22)*
Thorne Institute*	2 (35)*
Rolling Rock	85 (2)
Christiansen Park	14 (55)
Papini	5 (13)
South Boulder Recreation Center	2 (19)

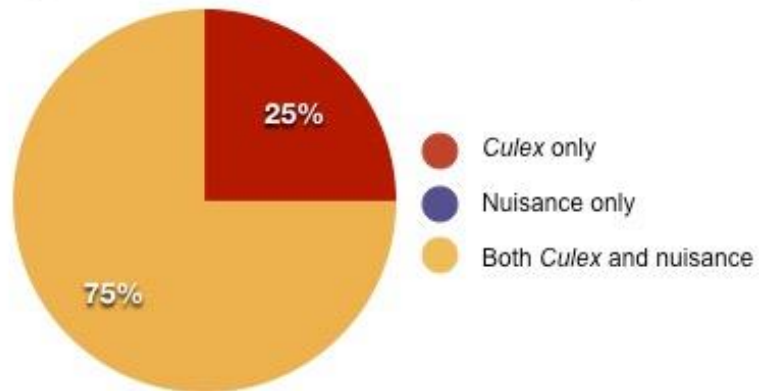
* Trap is from nuisance mosquito control program

Mosquito Larval Control Treatments

The week of July 29, a total of 238 site inspections occurred and 4 were treated.

- Sites treated with *Culex*-only larvae: 1
- Sites treated with nuisance-only larvae: 0
- Sites treated with both *Culex* with nuisance larvae: 3

Percentage of sites treated for Culex and nuisance mosquitoes



If you have any questions, please contact Rella Abernathy at 303-441-1901.